REMARKS

The Applicant thanks Examiner Huber for the courtesy of recently attending a telephone interview with the Applicant's representatives Mr. Frank Gerratana (Reg. No. 62,653) and Mr. Timothy Bryan (Reg. No. 62,791) on June 16, 2009 and again on June 17, 2009, with Mr. Frank Gerratana, to discuss the cited references and possible claims amendments. Based upon the discussion, the claims have been amended.

Claims 1, 3-8, and 10-20 are presented for examination, of which claims 1 and 18 are independent. Favorable reconsideration and further examination are respectfully requested.

Claim Rejections

Claims 1, 3-8, 10-14, and 16-20 were rejected over U.S. Patent No. 3,569,997 (Lehovec) in view of U.S. Patent No. 7,129,466 B2 (Iwasaki). Claim 15 was rejected over Lehovec and Iwasaki in view of U.S. Patent No. 3,763,272 (Fedotowsky). As shown above, Applicant has amended claims 1 and 18 to state that there are at least three radiation-sensitive zones. In view of this amendment and the following remarks, withdrawal of the art rejections is respectfully requested.

The Office Action (pages 2-3) apparently equates the integrated electro-optical structure described by Lehovec to the optoelectronic component of the claims. The Office Action further suggests that it would have been obvious, in view of Iwasaki, to modify Lehovec to include multiple, stacked radiation sensitive zones formed in silicon such that radiation-sensitive zones configured to detect shorter wavelengths of the electromagnetic radiation are at greater distances

from the optical element compared to radiation-sensitive zones configured to detect longer wavelengths of the electromagnetic radiation.

As correctly indicated at page 3 of the Office Action:

> **Lehovec is silent with respect to the radiation sensitive zone having multiple radiation sensitive zones, and wherein the radiation-sensitive zones are at varying distances from the optical element such that radiationsensitive zones configured to detect shorter wavelengths of the electromagnetic radiation are at greater distances from the optical element compared to radiation-sensitive zones configured to detect longer wavelengths of the electromagnetic radiation.**

Iwasaki was cited to make up for the deficiency of Lahovec (page 3). However, the Office Action does not take into account the technical difficulties associated with arranging radiation-sensitive zones for shorter wavelengths below radiation-sensitive zones for longer wavelengths, where the radiation zones are formed in silicon. In contrast to the features of the amended independent claims 1 and 18, Iwasaki describes a light-receiving device that includes a first, topmost light-receiving part that is made of organic semiconductor material and no more than two further light-receiving parts in a silicon substrate that are arranged in such a way that the wavelength that is detected in the topmost zone is between the detected wavelengths in the light-receiving parts below. (See, e.g., id. at col. 6, lines 15-29; see also id. at col. 7, line 61-col. 8, line 4).

The arrangement of the light-receiving parts described by Iwasaki appears to depend on the low absorption behavior of the organic semiconductor material. The organic material has a low absorption and is arranged on top of the structure. This is due to the higher absorption of silicon for short wavelengths, which is demonstrated, for example, in Iwasaki's FIG. 23 and also explained in col. 1, line 61-col. 2, line 3 of Iwasaki.

In summary, Iwasaki, in his background, discusses a known structure in which no more than two light-receiving parts made of silicon are arranged such that light of a shorter wavelength is detected in a light-receiving part located closer to the surface, and light of a longer wavelength is detected in a light receiving part existing at a deeper location (See, e.g., Iwasaki at col. 1, line 67-col. 2, line 3). And, Iwasaki also discloses that it is possible to deviate from this known arrangement by using an organic semiconductor material on a top surface of the structure. (See, e.g., Id. at col. 6, lines 15-29). However, it would not have been obvious to deviate from the known structure, in which shorter wavelengths are detected above of the longer wavelengths, in view of Iwasaki if three of the radiation-sensitive zones were made of silicon, as claimed in amended independent claims 1 and 18.

In contrast, in the amended claims 1 and 18, a zone plate is used to overcome the above mentioned problem of strong absorption of electromagnetic radiation at shorter wavelengths that exists in multiple radiation sensitive zones formed in silicon. Because of the focusing effect of the zone plate, the radiation sensitive zones configured to detect shorter wavelengths of electromagnetic radiation can be placed at greater distances from the optical element compared to radiation sensitive zones configured to detect longer wavelengths of electromagnetic radiation, even if there are at least three radiation sensitive zones.

In view of the foregoing discussion, Applicant requests reconsideration and withdrawal of the rejection of claims 1, 3-8, 10-14, and 16-20 as being unpatentable over Lehovec in view of Iwasaki.

Claim 15 depends from claim 1, and thus is patentable for at least the reasons discussed above. Fedotowsky, relied on for its alleged teaching that "a silicon nitride (Si_3N_4), antireflective coating may be formed on a SiO_2 zone plate" does not remedy the deficiencies of Lehovec and Iwasaki discussed above.

Therefore, Applicant respectfully request that the rejections of claim 15 as unpatentable over Lehovev in view of Iwasaki and further in view of Fedotowsky be withdrawn

Each of the dependent claims is believed to define patentable features of the invention. Each dependent claim partakes of the novelty of its corresponding independent claim, in light of the foregoing amendments, and, as such, has not been discussed specifically herein.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the application is in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Please charge any additional fees, not already covered by check, or credit any overpayment, to deposit account 06-1050, referencing Attorney Docket No. 14603-0022US1.

Respectfully submitted,

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